REMARKS

[1] The objection to the claims is addressed by the present amendments, which are formal and are not made in response to any rejection.

[2-3] Claims 1-8 were rejected over Zhang (US patent application 2002/132201). This rejection is respectfully traversed.

Zhang in Figs. 1-7 (the first embodiment) shows an inclined striking safety lighter, characterized in that a resilient element 5 is set in the ignition cap, the right end of resilient element 5 is embedded in the ignition cap, its middle part has a locker arm 51, and the left end is connected with operation button 4. When the operation button is opened by outside force, the ignition cap can be stricken inclinedly in the right direction, igniting the lighter. When the outside force is eliminated, the ignition cap of the lighter should be replaced spontaneously to its original position under the elasticity action alone. However, in Zhang's device it is very difficult to realize such replacement spontaneously. The reason is that the elasticity is reduced almost to zero when the movable operating part 71 of the piezoelectric unit 70 goes up to the top, and therefore it is very difficult to make the locker arm of the resilient element engage with the locking latch 61; thus, it cannot act as a safeguard.

There are numerous differences between the Applicant's lighter and the applied embodiment of Zhang:

(1) The Examiner asserts (line 6 of ¶ 3) that Zhang Fig. 1 shows a crow plate, but there is no citation, either by reference numeral or by description, to indicate what is asserted to anticipate the crow plate. The Applicant respectfully points out that the depressing arm 12 is the

sole moving part of Zhang that works the movable operating part 71 of the piezoelectric assembly 70 (Fig. 1; col. 4, lines 18-23; col. 3, lines 42-48), so the depressing arm 12 is the only part that could possibly correspond the Applicant's crow plate, which "caus[es] ... the piezoelectric assembly to act coordinately" (claim 1, line 4, as amended).

However, the Examiner asserts that the depressing arm 12 anticipates the Applicant's strengthener. Since a single feature in the reference cannot anticipate two different features in the claim, at least one of the crow plate and the strengthener is not anticipated.

(2) The action is different:

A. The present invention is stricken vertically, whereas Zhang is stricken on an incline (col. 4, line 21).

B. The position of the operation button, in the present invention, is on the right end of the ignition cap (i.e. adjacent to piezoelectric unit), whereas that of Zhang is on the left end of the ignition cap (i.e. apart from piezoelectric unit).

C. Zhang acts through the locker arm 51 engaged with the locking latch 61, but this structure is difficult to replace, unstable, and the locking is insecure. The Applicant overcomes the drawback of the Zhang structure, using a reset spring 11 to control push key 10, and using lobe 20 located at the bottom of push key 10 to control the turn of strengthener 12 (i.e., it makes the lobe withstand or withdraw the strengthener to control the turn of the strengthener), and using the strengthener to control the ignition for firing the piezoelectric assembly. Crow plate 14 opens the gas valve, the press trigger is connected with the push key, spring, strengthener, oil tank and windbreak hood, and when the push key is opened in the fixed direction, the press trigger and

strengthener act together to push down the piezoelectric push rod and crow plate, to make the gas valve open and the piezoelectric assembly discharge; the lighter ignites when the outside force is eliminated, and the lighter resumes its safeguard state spontaneously under the action of elasticity alone.

(3) The connection of the ignition cap is another difference. In the present invention it is direct to the top of the oil tank and is moved up and down therein, whereas in Zhang it is moved through the connection with the shaft pin of the casing.

(4) The present invention mitigates the press force of the lighter by the its use of the strengthener, ignition cap, piezoelectric assembly, inner hood, oil tank and crow plate, whereas in Zhang the force is arduous because the ignition cap inclinedly strikes the piezoelectric assembly and crow plate.

(5) The safeguard part of the present invention is the lobe of the push key, which is firm and stable, and returns spontaneously, whereas the safeguard part of the Zhang is the engagement locker arm 51 with locking latch 61, which is unstable and difficult to be returned spontaneously, so that the reliability is poor.

The non-applied portions of Zhang also fail to disclose the claimed subject matter:

The differences between the embodiment of Figs. 8-10 and the first Zhang embodiment are as follows: the position of the resilient element 5' is turned 90 degrees, the right end of the resilient element is affixed to an inner wall of the ignition cap 1' by a bolt, and the locker arm 51' is extended from the left end of the resilient element 5', engaged with the locking latch 61' for blocking sideward movement of the ignition cap 1'; this structure is inconvenient in use and

mechanically awkward, and the child-proofing makes it difficult for adults to use, since the action of the press force is on the left end of the ignition cap and the ignition cap cannot be pulled to the right.

The structure of Figs. 11-13 is a vertical-strike type of the lighter, which makes use of the left end of the resilient element extended toward the locking latch 61" to form the locker arm 51" to actuate the safeguard. When the operation button 4" pushes the resilient element to move out the locking latch 61", the ignition cap is depressed downwardly and the movable operating part 71" of the piezoelectric unit 70" is compressed to ignite the piezoelectric lighter. Since the ignition cap directly acts on the piezoelectric assembly, it needs greater force to ignite the piezoelectric assembly, so that operation is more inconvenient and arduous.

Differences between the lighters of Zhang and the Applicant are as follows:

(1) Shang uses the resilient element to block the movement of the ignition cap; the Applicant uses the lobe of the push key to block the movement of the press trigger.

(2) Zhang uses the resilient element, the Applicant uses a reset spring.

(3) In Zhang the resilient element is astride two ends of the ignition cap; the Applicant sets the spring on one end of the press trigger.

(4) Zhang's resilient element has two effects: one is elasticity, the other is stopper. The Applicants has only elastic action.

(5) There are differences among the shape, position and effect of the push key. In Zhang, the position of the push key is on the left end of the ignition cap, and its effect is to push the

resilient element to move; according to the Applicant, the position of the push key is on the right end of the press trigger, and its effect is to block up the turn of the strengthener.

(6) The safeguard part is different. In Zhang it is the resilient element; according to the Applicant, it is the lobe which is at the bottom of the push key.

(7) The press force of the ignition cap is different. In Zhang it has no laborsaving structure, contrary to the Applicant.

(8) The shape, position and connection structure of the ignition cap are different.

(9) The associated structure of the oil tank, ignition cap, strengthener, crow plate, inner hood and gas valve are different.

Above all, the structure of the present invention is simple, reliably safe, convenient, and laborsaving.

Withdrawal of the rejections isrequested.

Respectfully submitted,

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Nick Bromer (Reg. No. 33,478)
RABIN & BERDO, P.C.
CUSTOMER NO. 23995
Telephone: (202) 371-8976
Telefax : (202) 408-0924